with a radius cutter of the same radius as the drill to be used. This feature, in connection with the lip on the work, answers the same purpose as a drill bushing, no other means of guiding the drill being necessary. The production of this jig was about 4000 caps per day.

Jig having Lever- and Spring-operated Clamping Members. — The jig shown in Fig. 6 is used for drilling i.250-inch holes in the motor truck steering arms, shown in Fig. 7. Owing to the means provided for securing work in this jig ready to be

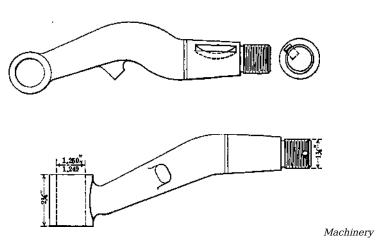


Fig. 7. Type of Steering Arm drilled in Jig shown in Fig. $\mathbf{6}$

drilled, and for releasing the finished part after the operation has been performed, this is known as a "pump" jig. Bushing A is bell-mouthed on the lower side, and drops down over the top of the boss at the end of the steering arm. The threaded end of the work is supported by means of a slotted block B carried at the end of bracket C.

When it is desired to set up a piece of work in the jig, "pump" handle D is pushed down; this handle swings on pivots E, with the result that rods F raise jig bushing A against the pressure applied by coil springs G. The piece of work is then slipped into place and handle D is released so that springs G apply sufficient pressure to enable bushing A to hold the work in the desired position to be drilled. This arrangement will be